

Applicant: Coach Wei, et al
U.S.S.N.: 10/017,183
Filing Date: February 19, 2003
EMC Docket No.: EMC-06-235

REMARKS

The Office Action mailed April 5, 2006 has been carefully considered. In the Office Action, Claims 1-21 remain pending and all 21 claims have been rejected. Claims 1-6, 11, 12 have been amended in this action. The claims were amended to correct grammatical errors as well as enhancing claim readability. Claims 19-21 have been cancelled and replaced with claims 22-25. The new and amended claims contain no new matter and are believed to be supported by the original specification. Reconsideration of the above referenced rejections of Claims 1-18 and 22-25 is hereby requested in view of the following remarks.

In this office action, a new oath, declaration, or application data sheet was requested to correct a lack of inventor address. Please find enclosed in this response, a supplemental Application Data Sheet that provides the inventors' addresses.

The Examiner also objected to the abstract as it was over 150 words in length. Applicants therefore request the abstract be replaced with the above modified abstract.

The Examiner requested removal of an embedded hyperlink in the specification. The hyperlink is removed in the above modifications to the specification.

The Examiner has also objected to the addition of the disclosure on page 2 line 1 through page 5 line 8. Applicants respectfully have amended the specification to remove the objected material.

The Examiner rejected Claims 19, 20, and 21 under 35 U.S.C. 101 for being directed to non-statutory subject matter. While Applicants believe that Claim 19 was allowable in previous form, it has been cancelled and replaced by Claim 22 to more clearly state Applicants' invention.

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Claims 20 and 21 were asserted to recite both a method and a system and therefore rejected as indefinite and were rejected under 35 U.S.C. 101. Claim 20 and 21 were also rejected under 35 U.S.C. 112 first paragraph as failing to comply with enablement. Claims 20 and 21 have been cancelled and replaced by Claims 23-25. Applicants assert that new claims 22, 23, 24, and 25 are allowable and supported by the original specification.

Claims 1-21 were rejected under U.S.C. 112, second paragraph as being indefinite for lack of antecedent basis. Claims 1-21 were also objected to for numerous formalities. Based on the above amended claims, these points for rejection and objection have been removed and Applicants believe these claims are now allowable.

Examiner also rejected Claims 1-8, 11, and 13-21 as being anticipated under 35 U.S.C. 102(e) by U.S. Patent No. 6,901,554 to Bahrs et al. ("Bahrs"). Applicants herein argue that Bahrs does not anticipate the current invention and request removal of this rejection.

Finally, Examiner also rejected claims 9, 10, and 12 under 35 U.S.C. 103(a) as unpatentable over Bahrs in view of U.S. Patent No. 6,615,131 to Rennard et al. ("Rennard"). Applicants herein argue that neither Bahrs nor Rennard anticipates the current invention, there is no motivation to combine these references, and request removal of this rejection.

One portion of Applicants invention, as stated above, is to enable an application, to be developed once and deployed many times to different types of machines. This means a developer could write a program once, and the invention would provide a methodology to translate this GUI to computers as well as handheld devices such as a Pocket PC or Palm. This is accomplished by re-writing the Java GUI API "interface which is replaced by the network-aware GUI API."

102 Rejections

A claim is anticipated under U.S.C. § 102 only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.

Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987); as cited in MPEP §2131. Applicants respectfully submit that there is at least one element in the rejected claims which is not set forth in Bahrs and therefore it does not teach or suggest every aspect of the current invention.

Claim 1

Applicants respectfully disagree with Examiner's assertions that the Bahrs patent can be used for a 102 rejection of Claim 1 as it does not teach or suggest every aspect of the current invention. Applicants respectfully disagree that Bahrs teaches a "method for delivering applications over a network in which the business logic of the application is running on the backend server." Bahrs represents a distributed data processing system. (Column 12 lines 27-40). By definition, a distributed data processing system is one where the processing is distributed across the devices in the system. Processing is not done, like the current invention, on the backend server. In fact, Examiner repeatedly quotes passages of the Bahrs reference where it describes a distributed data processing system. Therefore, as Bahrs teaches the opposite of a central processing center, it can not teach or suggest "where the business logic of the application is running on a backend server." As a result, Bahrs can not suggest the business logic running on a backend server as the application logic in Bahrs is rendered on the client device. This is because Bahrs' logic, not centrally performed, must be distributed across the nodes of the network. (Bahrs Column 12 lines 39-44).

Applicants also respectfully disagree with Examiner's assertion that Bahrs discloses a "replacing the GUI API with a network aware GUI API running on a backend server which translates the application's presentation layer information into pre-determined format based messages which describe the Graphical User Interface." Bahrs only presents a set of design patterns to be used to leverage and enhance an existing API. A design pattern is a set of reusable abstract answers; where Bahrs' abstract answers are a set of solutions to easily tailor software to work on different client computers. The present invention presents a wholly different solution by re-defining an API such that an application can be developed once in a standard manner and deployed multiple times through the use of the network-aware API. This does not mean, as is taught in Bahrs, a GUI API that is on the network or aware of the network, but is, as specified in the current invention, re-placed by another API.

Applicants also respectfully disagree with Examiner that Bahrs re-implements any API, or implements one that is network aware instead of being local machine centric as traditional GUI APIs. Applicants are unsure why Examiner quotes material from Bahrs, col. 17 lines 25-39, to support this, as this passage in Bahrs describes sending of data between different design patterns. Here Bahrs describes the methodology of inter-object data transfer but does not mention an API, a network, or local machines. Expanding out from this section, Bahrs is describing the general design patterns or software architecture that is used to custom tailor applications to run on different clients.

In the Bahrs reference, the word API is mentioned once and implementing or re-implementing an API is not suggested. In fact, Column 14 lines 46-51 Bahrs specifically points out that the already developed API is extended and leveraged not replaced or implemented.

Since Bahrs uses the existing API, the Bahrs reference does not disclose re-implementing.

Further, neither in this section or the entire patent does Bahrs teach or suggest implementing any sort of API nor even defining one to be network aware. Bahrs' methodology is to provide a design pattern tool set to enable a user to leverage an existing API. Therefore, Bahrs can not and does not teach or suggest implementing or replacing an API with a network aware API.

Applicants disagree that Bahrs teaches an invention that "translates the application's presentation layer information into pre-determined format based messages which describe the Graphical User Interface event processing registries and other related information corresponding to the presentation layer of the application in a high level, object level, messages." Applicants assert that Examiner misunderstands the definition of an application's presentation layer, which includes the structure of the GUI that is used to present information to the user. The presentation layer does not describe the data information displayed to the user, but the conveying vehicle such as text boxes, check boxes, as well as, but not limited to, the general layout of the display.

Bahrs describes in general and specifically in Examiner's quote (Column 38 line 64-Column 39 line 5) translating user entered data into different formats. By user data, it refers to data that is displayed in the GUI such as numbers. By translating data into different formats, Bahrs means changing Integers to the Java String class, which is roughly equivalent to a character array. It does not teach or suggest translating information that can be used to describe the presentation layer, only the actual data to be displayed, not the display container. These are tangible different and distinct functions. Therefore, as Bahrs teaches or suggests no method to describe the data layer in pre-determined format based messages it can not nor does not teach or suggest Claim 1.

Further, the asserted reference of event processing registries and other related information specifically states (Column 24 line 36-59) that these operations are to be performed on the client machine not described or transmitted over the network. The portion of the Bahrs reference Examiner asserts covers “sending such messages to the client via a network” (Column 41 line 66- Column 42 line 19) refers only to data to be displayed not data that describes the presentation layer of the application. As such, Bahrs does not teach or suggest transmitting data that describes the application’s presentation layer.

Applicants respectfully disagree that Bahrs, in general or at Examiner’s quote, teaches or discloses a method in which the API “delivers the user experience for that device according to the capability of the specific client device.” The Bahrs reference only offers a set of tools to modify or develop and tailor an application to a particular client. None of the structure that Bahrs provides is an implementation or re-implementation of the API nor does it modify, without code changes, the display of the application on different clients.

Applicants respectfully disagree that Bahrs discloses “processing the user input and client-side events on the backend server.” The Bahrs reference has a methodology where it handles user events on the client side and only transmits requests for or updates when user inputted data changes. It does not send data between the client and server machines that represent events or actions taken by the user not does it send back and forth descriptions of the presentation layer.

Yet, Applicants think Bahrs is a good example of why the current invention is not anticipated by the prior art. Previous solutions, such as the one outlined in Bahrs, have focused on working with the current architectural components provided in API systems. Bahrs focuses

on providing tools to augment the API to better enable developers to customize their applications to run on different client machines. A good example of this is Column 65 lines 44-47 of the Bahr reference where it says that object re-use on a client may be 50-100 percent. The current invention however, uses a different approach by taking an application, developed for any client system, and providing an API capable of translating this graphic display to one for any client machine. Instead of Bahrs method of tailoring each application, the current invention simply creates an API that translates each application's GUI to the capabilities of each respective client.

Based on the foregoing arguments Applicants believe Claim 1 is now allowable. Applicants respectfully request Examiner remove this rejection and place this claim in condition for allowance. Further, Claims 2-18 are rejected under 35 U.S.C. 102 as being un-patentable over Bahrs. These rejections are also respectfully traversed. Based on Applicants' arguments above, Applicants assert independent Claim 1 is now allowable. Since Claims 2-18 depend from Claim 1 these claims are allowable for at least the same reasons as the claims from which they depend. Accordingly, Applicants believe the rejections under 35 U.S.C. 102 are moot and should be withdrawn. However, Applicants herein provide further arguments for the allowability of Claims 2-18.

Claim 2

Applicants respectfully disagree that Bahrs teaches the Graphical User Interface and API event processing API is Java Foundation Classes. As stated above, Bahrs does not describe the current invention in Claim 1 and this claim is now believed to be allowable. The addition of the API being Java Foundation Classes does not change this. Further, Bahrs does not suggest replacing the API that is the Java Foundation class rather only suggests augmenting it. Since

these are different uses Bahrs does not disclose implementing an API to replace the Java Foundation classes. Based on this and the foregoing arguments, Applicants respectfully request removal of the 102 rejection of Claim 2.

Claim 3

Applicants respectfully disagree with Examiner's assertion that Bahrs teaches the invention of Claim 3 where the client-side program is based on an Operating System's API, such as Windows API or X Windows API. As this claim is based on Claim 1, which Applicants believe is now allowable; the addition of a particular operating system does not make this claim un-patentable. Further, Bahrs does not say that the program is based on the operating system's API rather that it is based on the Java API. Examining the quoted reference (column 34 lines 30-39), it only refers to the entry point of the operating system of the program to the system not any specific operating system and this is in the context of the Java API. Based on these and the foregoing arguments, Applicants respectfully request removal of the 102 rejection of Claim 3.

Claim 4

Applicants respectfully disagree that Bahrs teaches the client-side program is a wireless device program written using the device's Operating System's API such as Palm API and Windows CE API. As stated above, Bahrs only discloses using this method for a Java API. It mentions deploying a specially tailored application developed using the java design patterns on different platforms but does not mention the Palm API or the Windows CE API or using a non-Java API. Also, as Applicants now believe Claim 1 to be allowable, dependant Claim 4 should be allowable for at least the same reasons and the addition of the use of an operating specific API

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does not render it un-patentable. Based on these and the foregoing arguments, Applicants respectfully request removal of the 102 rejection of Claim 4.

Claim 5

Applicants incorporate the arguments of Claim 1 and further respectfully disagree that Bahrs teaches the invention of Claim 1 where the client-side program is a Java program written using a Java API. First, Bahrs teaches writing a client side program for each client using his invention as a toolbox to speed development. By definition, using a toolkit to augment development of a program is not the same as developing a program solely with an API. Further, the current invention does not teach development for any specific client rather a development once and deployment to multiple clients. Therefore, unlike the current invention, Bahrs does not teach or suggest creating a program using solely the Java API. Based on these and the foregoing arguments, Applicants respectfully request removal of the 102 rejection of Claim 5.

Claim 6

Applicants incorporate the arguments of Claim 1 and respectfully disagrees that Bahrs teaches the Java API to be replaced in Claim 1 is the AWT. As Bahrs does not suggest replacing the API, it can not suggest that the API to be replaced is the AWT. Therefore, as Bahrs does not teach or suggest replacing the API or AWT it can not be used as a 102 rejection against this claim. Based on these and the foregoing arguments, Applicants respectfully request removal of the 102 rejection of Claim 6.

Claim 7

Applicants incorporate the arguments of Claim 1 and further respectfully argue that Examiner's assertion that Bahrs includes HTTP does not preclude the invention of Claim 1

where the predetermined protocol is HTTP. As Applicants believe Claim 1 is now allowable, the addition of HTTP in dependent Claim 7 does not render it un-patentable. Also, Bahrs does not use HTTP as the predetermined protocol to send a description of the presentation layer as Bahrs never discloses communication of the presentation layer of a GUI. Rather, it only disclosed transmission of data to be displayed in the GUI. Based on these and the foregoing arguments, Applicants respectfully request removal of the 102 rejection of Claim 7.

Claim 8

Applicants incorporate the arguments of Claim 1 and further respectfully argue that Examiner's assertion that Bahrs includes HTTPS does not preclude the invention of Claim 1 where the predetermined protocol is HTTPS. As Claim 1 is now allowable, the addition of HTTPS in dependent Claim 8 does not render it un-patentable. Also, Bahrs does not use HTTPS as the predetermined protocol to send a description of the presentation layer of the GUI client. Bahrs only uses the network transport means to send user data between network and server. That is, data to be displayed not the method of displaying the data. Based on these and the foregoing arguments, Applicants respectfully request removal of the 102 rejection of Claim 8.

Claim 10

Applicants incorporate the arguments of Claim 1 and further respectfully argue that Bahrs specific reference of the network does not preclude the invention of Claim 10. As Claim 10 is based on Claim 1 and Applicants assert that it is now allowable, Claim 10 should also be allowable for at least the same reasons. Also, the addition of the network in dependent Claim 10 does not render it un-patentable. Further, the Applicants use of the network, to send information to describe the application presentation layer, is wholly different than that of Bahrs which uses

the network to send user data between server and client. Based on these and the foregoing arguments, Applicants respectfully request removal of the 102 rejection of Claim 10.

Claim 11

Applicants incorporate the arguments of Claim 1 and further respectfully argue that Examiner's assertion that Bahrs includes XML does not preclude the invention of Claim 11. As Claim 11 is dependant on Claim 1 and Applicants now believe Claim 1 is condition for allowance, Claim 11 should be allowable for at least the same reasons. The addition of XML to Claim 1 does not render it un-patentable. Further, the Applicants use of the XML, to send information to describe the application presentation layer, is wholly different than that of Bahrs which uses XML to send user data between server and client. Based on these and the foregoing arguments, Applicants respectfully request removal of the 102 rejection of Claim 11.

Claim 13

Applicants incorporate the arguments of Claim 1 and further respectfully argue that Bahrs inclusion of the internet does not preclude the invention of Claim 13. Applicants assert Claim 1 is allowable and therefore dependant Claim 13 should be allowable for at least the same reasons. The addition of the internet does not change this finding of patentability. Further, the Applicants use of the internet, to send information to describe the application presentation layer, is wholly different than that of Bahrs which uses the internet to send user data between server and client. Based on these and the foregoing arguments, Applicants respectfully request removal of the 102 rejection of Claim 13.

Claim 14

Applicants incorporate the arguments of Claim 1 and further respectfully argue that Bahrs inclusion of a local area network does not preclude the invention of Claim 14. The Applicants use of a local area network, to send information to describe the application presentation layer, is wholly different than that of Bahrs which uses the local area network to send user data between server and client. Based on these and the foregoing arguments, Applicants respectfully request removal of the 102 rejection of Claim 14.

Claim 15

Applicants incorporate the arguments of Claim 1 and further respectfully argue that Examiner's assertion that Bahrs includes a bandwidth-limited slow speed network does not preclude the now allowable invention of Claim 1, nor the dependant Claim 15 where the network is the bandwidth-limited slow speed network. The Applicants use of a bandwidth-limited slow speed network, to send information to describe the application presentation layer, is wholly different than that of Bahrs which uses the bandwidth-limited slow speed network to send user data between server and client. Based on these and the foregoing arguments, Applicants respectfully request removal of the 102 rejection of Claim 15.

Claim 16

Applicants incorporate the arguments of Claim 1 and further respectfully argue that Bahrs does not include a wireless network and this does not preclude the invention of Claim 16. First, Bahrs does not mention a wireless network and only mentions mobile communications in Column 15 lines 25-52. By mobile communications Bahrs is referring to networking by the use of telephone lines. Per the Bahr specification, column 12 lines 13-15, Bahrs only discloses a

wired network including temporary network lines such as phone connections. In no place does Bahrs suggest or teach the use of his invention over a wireless network. Examiner may have asserted the word mobile to be synonymous with wireless, but as stated in the preceding reference to the Bahrs specification, this is not the case. Based on these and the foregoing arguments, Applicants respectfully request removal of the 102 rejection of Claim 16.

Claim 17

Applicants incorporate the arguments of Claim 1 and further respectfully argue that Bahrs presenting different client types does not teaches or disclose Claim 17 where the client device is selected from the group of workstations, desktops, laptops, PDAs, wireless devices, and other edge devices. First, Bahrs does not mention wireless devices but only mobile devices such as a portable computer or PDA in Column 15 lines 25-52. With these mobile devices, Bahrs is referring to networking by the use of telephone lines. Per the Bahr specification, column 12 lines 13-15, Bahrs only discloses a wired network including temporary network lines such as phone connections. In no place does Bahrs suggest or teach the use of his invention with wireless devices. Examiner may have asserted the word mobile to be synonymous with wireless, but as stated in the preceding reference to the Bahrs specification, this is not the case. Based on these and the foregoing arguments, Applicants respectfully request removal of the 102 rejection of Claim 17.

Claim 18

Applicants incorporate the arguments of Claim 1 and further respectfully argue that Bahrs does not disclose combining the server and client into one entity. Bahrs, in Column 17 lines 61-67, discloses that a client may be able to fulfill its own messaging requests. It does, at no point,

clearly point out or infer that the client and server are one entity. Also, based on the Applicants assertion that Claim 1 is now allowable, Claim 18 would be allowable for at least the same reasons. Based on these and the foregoing arguments, Applicants respectfully request removal of the 102 rejection of Claim 18.

103 Rejections

The three basic criteria for establishing a *prima facie* case of obviousness under 35 U.S.C. § 103 are set out at MPEP 2143. First, there must be some suggestion or motivation, either in the reference itself or in the knowledge generally available to one of ordinary skill in the art, to modify the reference. Second, there must be a reasonable expectation of success. Finally, the prior art reference must teach or suggest all the claim limitations.

As set out by MPEP 2143, there must be some suggestion or motivation, either in the reference itself or in the knowledge generally available to one of ordinary skill in the art, to modify the reference. There must also be a reasonable expectation that this modification will succeed. The teaching or suggestion to make the modification and the reasonable expectation of success must both be found in the prior art, not in Applicants' disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991) cited at MPEP 2143.

Per the MPEP 2143.01, "[t]here are three possible sources for a motivation to combine references: the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the art." *In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457-58 (Fed. Cir. 1998) (The combination of the references taught every element of the claimed invention, however without a motivation to combine, a rejection based on a *prima facie* case of obvious was held improper.)" Further MPEP states 2143.01 states that

“[t]he level of skill in the art cannot be relied upon to provide the suggestion to combine references. *Al-Site Corp. v. VSI Int’l Inc.*, 174 F.3d 1308, 50 USPQ2d 1161 (Fed. Cir. 1999).”

Outside the current application, there is no suggestion to combine the mentioned references.

Claim 9

Applicants incorporate the arguments of Claim 1 and further respectfully disagree that Bahrs teaches wireless devices, or that there is motivation to combine Bahrs with Rennard. First, Bahrs does not teach a wireless protocol. Per the Bahr specification, column 12 lines 13-15 Bahrs only discloses a wired network including temporary network lines such as phone connections. In no place does Bahrs suggest or teach the use of his invention over a wireless network. Examiner may have asserted the word mobile to be synonymous with wireless, but as stated in the preceding reference to the Bahrs specification, this is not the case.

There is also no motivation to combine these two references. Bahrs is an invention that is directed to providing design patterns to facilitate development of client applications. Conversely, Rennard is a system to rely navigation systems and location based information to portable devices such as cell phones. There is no suggestion in either patent or the art to combine one with the other. Addressing Examiner’s cited motivation reference; Rennard clearly states it would be desirable to provide a navigational system and service that can be implemented with systems of different computing power. This statement means that it would be beneficial to have a methodology to provide navigation services on devices of different computing power. Providing Navigational services requires the use of GPS or other sensors to provide the user with a location. The processing of this sensory data is often processor intensive thus necessitating a methodology to efficiently process this data. This is the solution and motivation that Rennard

provides. It does not provide motivation to combine its answer with one that provides a set of design patterns to augment an API and facilitate GUI development. Development of GUI applications and development of efficient GPS processing routines are not similar and do not overlap. Based on this and the foregoing arguments, Applicants request there removal of this 103 rejection.

Claim 10

As Applicants assert Claim 1 is now allowable in view of the foregoing arguments, the specification that the predetermined protocol is proprietary does not make the dependant Claim 10 un-patentable. Further, the Applicants use of the predetermined protocol, to send information to describe the application presentation layer, is wholly different than that of Bahrs which uses the predetermined protocol to send user data between server and client. Based on these and the foregoing arguments, Applicants respectfully request removal of the 103 rejection of Claim 10.

Claim 12

As Applicants assert Claim 1 is now believed allowable, in view of the foregoing arguments, Examiner's assertion that Bahrs discloses that the predetermined messaging format is proprietary does not make the dependant Claim 12 un-patentable. Further, the Applicants use of the predetermined messaging format which is proprietary, to send information to describe the application presentation layer, is wholly different than that of Bahrs which uses the predetermined messaging format which is proprietary to send user data between server and client. Based on these and the foregoing arguments, Applicants respectfully request removal of the 103 rejection of Claim 12.

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Conclusion

In view of the foregoing, the Applicants' believe that the application is in condition for allowance and respectfully request favorable reconsideration.

In the event the Examiner deems personal contact desirable in the disposition of this case, the Examiner is invited to call the undersigned attorney at (508) 293-6985.

Please charge all fees occasioned by this submission to Deposit Account No. 05-0889.

Respectfully submitted,

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